

1 GAATTCGGCACGAGGTTTTTTTTTTTTTCCCTCTTTCTTTCTTTCTTTAGCC 60

61 ATCCGAAAGAGCTGTCAGCCGCCGCCGGGCTGCACCTAAAGGCGTCGGTAGGGGGATAAC 120

121 AGTCAGAGACCCCTCCTGAAAGCAGGAGACGGACGGGTACCCCTCCGGCTCTGCGGGGCGG 180

181 CTGCGGCCCCCTCCGTTCTTCCCCCTCCCCGAGAGACACTCTTCCTTTCCCCCACGAAG 240

241 ACACAGGGGCAGGAACGCGAGCGCTGCCCTCGCCATGGGAGGCCGCTTCCTGCTGACG 300

FIG. 1A

301 CTCGCCCTCCTCTCGGCGCTGCTGTGCCGCTGCCAGGTTGACGGCTCCGGGGTGTTCGAG 360

361 CTGAAGCTGCAGGAGTTGTCAACAAGAAGGGGCTGCTCAGCAACCGCAACTGCTGCCGG 420

421 GGGGGCGGCCCCGGAGGCGCCGGGCAGCAGCAGTGCAGCTGCAAGACCTTCTTCCGCGTC 480

481 TGCCTGAGCACTACCAGGCCAGCGTCTCCCCGAGCGCCCTGCACCTACGGCAGCGCC 540

541 ATCACCCTCGTCTCGGCGCCAACTCCTTCAACCGTCCCCGACGGCGGGGCGGCGCCGAC 600

601 CCGCGCTTCAGCAACCCCATCCGCTTCCCTTCGGCTTACCTGGCCCGGCACCTTCTCG 660

661 CTCATCATCGAGGCTCTGCACACCGACTCCCCCGACGACCTCACCACAGAAAACCCGAG 720

FIG. 1A (cont'd)

721 CGCCTCATCAGCCGCTGGCCACCCAGAGGCACCTGGCGGTGGGCGAGGAGTGGTCCCAG 780

781 GACCTGCACAGCAGCGGCCG/ACCGACCTCAAGTACTCCTATCGCTTTGTGTGTGATGAG 840

841 CACTACTACGGGGAAGGCTGCTCTGTCTTCTGCGGCCCGTGACGACCGCTTCGGTCAC 900

901 TTCACCTGTGGAGAGCGTGGCGAGAGGTCTGCAACCCAGGCTGGAAGGGCCAGTACTGC 960

961 ACTGAGCCGATTTGCTTGCCCTGGGTGTGACGAGCAGCAGGCTTCTGCGACAAACCTGGG 1020

1021 GAATGCAAGTGCAGAGTGGCTTGGCAGGGCGGTACTGTGACGAGTGCATCCGATACCCA 1080

1081 GGCTGCCTGCACGGTACCTGTCAGCAGCCATGGCAGTGCAACTGCCAGGAAGGCTGGGGC 1140

FIG. 1A (cont'd)

GGCCTTTTCTGCAACCAGGACCTGAACTACTGCACTCACCACAAGCCATGCAAGAATGGT  
1141 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 1200

1201 -----+-----+-----+-----+-----+-----+-----+ 1260  
CGGTGTACGTGGTGTGGCCAGTCCCTCCATGTGAACAAGAACGGCTGGACCATGTGT

GGCTCCAGCTGCGAGATGAAA TCAACGAATGTGATGCCAACCCCTTGCAAGAA TGGTGGAA  
1261 +-----+-----+-----+-----+-----+-----+-----+-----+-----+ 1320

AGCTGCACGGATCTCGAGAACAGCTATTCCTGTACCTGCCCCCCAGGCTTCTATGGTAAA  
1321 -----+-----+-----+-----+-----+-----+-----+-----+-----+ 1380

1381      AACTGTGAGCTGAGTGCAATGACTTGTGCTGATGGACCGTGCTTCAATGGAGGGCGATGC      1440

1441    ACTGACAACCCTGATGGTGGATA CAGCTGCCCTGCCCACTGGGTATATCTGGGTTC AAC    1500

1501 TGTGAAAAGAAAATCGATTACTGCAGTTCCAGCCCTTGTGCTAATGGAGCCCAGTGC GTT 1560

**FIG. 1A (cont'd)**

1561 GACCTGGGGAACCTCTACATATGCCAGTGCCAGGCTGGCTTCACTGGCAGGCACTGTGAC 1620

1621 GACAAAGTGGACGATTGCGCCTCCTTCCCCTGCGTCAATGGAGGGACCTGTCAGGATGGG 1680

1681 GTCAACGACTACTCCTGCACCTGCCCCCGGGATACAACGGGAAGAACTGCAGCAGCCG 1740

1741 GTGAGCAGATGCGAGCACAACCCCTGCCACAATGGGGCCACCTGCCACGAGAGAGCAAC 1800

a

1801 CGCTACGTGTGCGAGTGCCTCGGGGCTACGGCGGCTCAACTGCCAGTTCTGCTCCCC 1860

1861 GAGCCACCTCAGGGGCCGTCATCGTTGACTTCACCGAGAACTACACAGAGGGCCAGAAC 1920

1921 AGCCAGTTTCCCTGGATCGCAGTGTGCGCCGGGATTATTCTGGTCCTCATGCTGCTGCTG 1980

FIG. 1A (cont'd)

2461 TAAACAGACGTGACGTGGCAAAGCTTATCGATACCGTCATCAAGCTT 2508

FIG. 1A (cont'd)

[illegible]

1 GAATTCGGCACGAGGTTTTTTTTTTTTTCCCTCTTTCTTTCTTTTCTTTGCCATCCGAAAG 69

70 AGCTGTCAGCCGCCGCCGGCTGCACCTAAAGGCGTCGGTAGGGGATAACAGTCAGAGACCCCTCCTGA 138

139 AAGCAGGAGACGGGACGGTACCCCTCCGGCTCTGCGGGCGGGCTGCGGCCCTCCGTTCTTTCCCCCTC 207

208 CCCGAGAGACACTCTTCCTTTCCCCCACAAGACACAAGGGCAGGAACGCGAGCGCTGCCCCCTCCGCC 276

277 ATGGGAGGCCGCTTCCTGCTGACGCTCGCCCTCCTCTCGGGCGCTGCTGTGCGGCTGCCAGGTTGACGGC 345

346 TCCGGGGTGTTCCAGCTGAAGCTGCAGGAGTTTGTCAACAAGAGGGGCTGCTCAGCAACCGCAACTGC 414

415 TGCCGGGGGGGGCGGCCCGGAGGCGCCGGGCAGCAGCAGTGCGACTGCAAGACCTTCTTCGGCGTCTGC 483

FIG. 1B

484 CTGAAGCACTACCAGGCCAGCGTCTCCCCCGAGCCGCCCTGCACCTACGGCAGCGCCAT

553 CTCGGCGCCAACTCCTTCAGCGTCCCCGACGGCGCGGGCGGCGCGACCCCGCCTTCA

622 CGCTTCCCCTTCGGCTTCACCTGGCCCGGCACCTTCTCGCTCATCATCGAGGCTCTGC

691 CCCGACGACCTACCCACAGAAAACCCCGAGCGCCTCATCAGCCGCTGGCCACCCAGA

760 GTGGGCGAGGAGTGGTCCCAGGACCTGCACAGCAGCGGCCGCACTGACCTCAAGTAC

FIG. 1B (cont'd)



GTGTGATGAGCACTACTACGGGGAAGGCTGCTCTGTCTTCTGCGGGCCCGTGACGACCGCTTCGGT 897

898 CACTTCACCTGTGGAGAGCGTGGCGAGAAGGTCTGCAACCCAGGCTGGAAGGGCCAGTACTGCACTGAG 966

967 CCGATTGTGCTTGCTGGGTGTGACGAGCAGCACGGCTTCTGCGACAAACCTGGGGAATGCAAGTGCAGA 1035

1036 GTGGGTGGCAGGGGCGGTACTGTGACGAGTGCATCCGATACCCAGGCTGCCTGCACGGTACCTGTCAG 1104

1105 CAGCCATGGCAGTGCAACTGCCAGGAAGGCTGGGGCGGCCTTTCTGCAACCAGGACCTGAACTACTGC 1173

1174 ACTCACCACAAGCCATGCAAGAATGGTGCCACATGCACCAACACCGGTCAGGGGAGCTACACTTGTCT 1242

1243 TGCCGACCTGGGTACACAGGCTCCAGCTGCGAGATTGAAATCAACGAATGTGATGCCAACCCCTGCAAG 1311

FIG. 1B (cont'd)

1312 AATGGTGGGAAGCTGCACGGATCTCGAGAACAGCTATTCTGTACCTGCCCCCAGGCTTCTATGGTAAA 1380

1381 AACTGTGAGCTGAGTGCAATGACTTGTGCTGATGGACCGTGCTTCAATGGAGGGCGATGCACTGACAAC 1449

1450 CCTGATGGTGGATACAGCTGCCGCTGCCCACTGGGTTATTCTGGGTTCAACTGTGAAAAGAAAATCGAT 1518

1519 TACTGCAGTTCAGCCCTTGTGCTAATGGAGCCCAGTGCCTTGACCTGGGGAACCTCCTACATATGCCAG 1587

1588 TGCCAGGCTGGCTTCACITGGCAGGCACTGTGACGACAACGTGGACGATTGCGCTCCTTCCCCTGCGTC 1656

1657 AATGGAGGGACCTGTCAGGATGGGGTCAACGACTACTCCTGCACCTGCCCCCGGGATACAACGGGAAG 1725

FIG. 1B (cont'd)

1726 AACTGCAGCACGCCGGTGAGCAGATGCGAGCACAACCCCTGCCACAATGGGGCCACCTGCCACGAGAGA 1794

1795 AGCAACCGCTACGTGTGCGAGTGCCTCGGGGCTACGGCGGCCTCAACTGCCAGTTCTGCTCCCCGAG 1863

1864 CCACCTCAGGGGCCGGTCATCGTTGACTTCACCGAGAAGTACACAGAGGGCCAGAACAGCCAGTTTCCC 1932

1933 TGGATCGCAGTGTGCGCCGGGATTATTCTGGTCTCATGCTGCTGCTGGGTTGCGCCGCCATCGTCGTC 2001

2002 TGGCTCAGGCTGAAGGTCGAGAAGAGGCACCAACAGCCGAGTCTGCGAGGAGTGAACGGAGACCATG 2070

2071 AACAACTGGCGAACTGCCAGCGCGAGAAGGACATCTCCATCAGCGTCATCGGTGCCACTCAGATTAAA 2139

2140 AACACAAATAAGAAAGTAGACTTTACAGCGATAACTCCGATAAAAACGGCTACAAAGTTAGATACCCA 2208

FIG. 1B (cont'd)

2209 TCAGTGGATTACAATTGTTGGTGCATGAACTCAAGAATGAGGACTCTGTGAAAGAGGAGCATGGCAAATGC 2277

2278 GAAGCCAAGTGTGAAACGTATGATTCAGAGGCAGAAGAGAAAAGCGCAGTACAGCTAAAAAGTAGTGAC 2346

2347 ACTTCTGAAAGAAAACGGCCAGATTCAGTATATTCCACTTCAAAGGACACAAAGTACCAGTCGGTGTAC 2415

2416 GTCATATCAGAAGAGAAAGATGAGTGCATCATAGCAACTGAGCTTAGTATCCACCTGGCACTCGGACA 2484

2485 AGTCTTGGTGTGTGATTCCCATCTAGCGCAGGTCAGGGCGGCCAAACCATTCTACCTGCTGCCACAGTC 2553

2554 ATCTGTACCCAATGAAAACCTGGCCACCTTCAGTCTGTGGCACTGCAGACGTTGAAAAAACTTGTGTGG 2622

FIG. 1B (cont'd)

2623 ATTAACATAAGCTCCAGTGGGGTTACAGGGACAGCAATTTTTCAGGCAAGGGTATAACTGTAGTGCA 2691

2692 GTTGTAGCTTACTAACCCTACTGACTCATTCTTTTCGTGTCTTCCTGCAGAGCCTGTTTTGCTTGGCA 2760

2761 TTGAGGTGAAGTCCTGACCCCTGTCATCCTCATAGTCCTCTGCTTTCTTTTTATTAAACCTCTTCTGGTC 2829

2830 TCTGCTTGTGTTTCTCTCAACAGGTGTAAACAGACGTGACGTGGCAAGCTT 2883

FIG. 1B (cont'd)



C-Delta-1	1	MGGRFLTLA-LLSALLCRQVDGSGVFELKLQEFVNKKGLLSNRNCCRGGGPGAGGQQQC	60
X-Delta-1	1	MGQQRMLTL-LVLSAVL--CQISCSGLFELRLQEFVNKKGLLGNMNCRRPGSL--ASLQRC	56
Delta	1	--MHWIKCLLTAFICFTVIVQVHS SSGSFELRLKYFSNDHGRDNEGRCCSGESDGA TKCLG	59
C-Delta-1	61	DCKTFFRVCLKHYQASVSPEPPCTYGSATPVLGANSFVSPDGAGGADPAFSPNPIRFPFGF	121
X-Delta-1	57	ECKTFFRICLKHYQSNVSPEPPCTYGGAVTPVLGTNSEVVPES-SNADPTFSPNPIRFPFGF	116
Delta	60	SCKTRFRLLCLKHYQATIDTTSQCTYGDVITPILGENSVNLTD AQR FQNKGFPTNPIQPPFSF	120
C-Delta-1	122	TWPGTFSLIIEALHTDSPDDLTTENPERLISRLATQRHLAVGEWSQDLHSSGRTD LKYSY	182
X-Delta-1	117	TWPGTFSLIIEALHADSADDLNTENPERLISRLATQRHLTVGEQWSQDLHSSDRTELKYSY	177
Delta	121	SWPGTFSLIVEAWH-DTNNSGNARTNKKLLQRLLVQVLEVSSEWKTNKSESQYTSLE YDF	180
C-Delta-1	183	RFVCDHEYHYGEGCSVFCRPRDDRFGHFTCGERGEKVCNPGWKQYCTEPICLPGCDEQHGF	243
X-Delta-1	178	RFVCDHEYHYGEGCSDYCRPRDDAFGHFTCGERGEKVCNPGWKGLYCTEPICLPGCDEHHGY	238
Delta	181	RVTCDLNYYGSGCAKFCRPRDDSGHSTCSSTETGEIICLTGWQGDYCHIEPKCAKGC--HGH	239
DSL			
C-Delta-1	244	CDKPGECKCRVGVQGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGGLFCNQDLNYCTHKKP	304
X-Delta-1	239	CDKPGECKCRVGVQGRYCDECIRYPGCLHGTCQQPWQCNCQEGWGGGLFCNQDLNYCTHKKP	299
Delta	240	CDKPNQCIVCQLGWKGALECNCEVLEPNCTHGTCKNKPTCTICNEGWGGGLVCNQDLNYCTNHRP	300
EGF1			
C-Delta-1	305	CKNGATCTNTGQGSYTCSCRPGYTGSSCIEIEINECDA--NPCKNGGSCD--LENSYSCT	360
X-Delta-1	300	CENGTCTNTGQGSYTCSCRPGYTGSNCEIEVNECDA--NPCKNGGSCSD--LENSYTC	355
Delta	301	CKNGATCTFNTGEGLYTCRCAPGYSGDDCENEIYS CDA DVNPCKNGGTCIDEPHTKTGYKCH	361
EGF3			
C-Delta-1	361	CPPGFYGKNCELSAMTCADGPCFNG----GRCTDNPDGGYSRCPLGYSGFNCEKKIDYC	416
X-Delta-1	356	CPPGFYGKNCELSAMTCADGPCFNG----GRCADNPDGGYICFCPGVYSGFNCEKKIDYC	411
Delta	362	CRNGWSGKMKCEKVLTCSDKPKCHQIGICRNVRPGLSGKGQGYOCCEPIGYSGFNCDLQLDNC	422
EGF5			
C-Delta-1	417	SSSPCANGAQCVDLGNSYICQCAAGFTGRHCDDNVDDCASFPFCVNGGTCQDGVNDYSCTCP	477
X-Delta-1	412	SSNPCANGARCEDLGNSYICQCAEGFSGRNCDDNLDDCTSFPCQNGGTCQDGVNDYSCTCP	472
Delta	423	SPNPCTINGGSGCQPSGK--CTICPSGFSGTRCETNIIDDCLGHCENGGTCIDMNVNYRCQCV	480
EGF6			
C-Delta-1	478	PGYNKKNCS TPVSRCEHNPCNNGATCHERSNRYVCECARGYGG LNCQFLLEPPQG	534
X-Delta-1	473	PGYIKKNCSMPITKCEHNPCNNGATCHERNRYVCCARGYGGNNCQFLLEP	524
Delta	481	PGFHGTHCSSKVDLC LIRPCANGGTCLNLNNDYQCTCRAGFTGKDCSVVIDECCSSGPCHNG	541
EGF8			
C-Delta-1	535	-----VIVDFTE--KYTEGQNSQFPW--IAVCAGIILVL	564
X-Delta-1	525	-----EKPVVVDLLE--KYTEGQSGQFPW--IAVCAGIIVLV	557
Delta	542	GTCMNRVNSFECVCANGFRGKQCEESYDSVTFDAHQYGATTQARADGLANAQVVLIAVFS	602
EGF9			
C-Delta-1	565	MLLLGCAAIIVVCVRLKVKQRHHQPEACRSETE TMNNLANCQREKD--ISISVIGA TQIKNT	623
X-Delta-1	558	MLLLGCAAIIVVCVRLVVRVQKRRHQPEACRGESEKTMNNLANCQREKD--ISVSF IGTTQIKNT	616
Delta	603	VAMP LVA VTAACVVFCKMKRK R KRAQEKD NAEARKQNEQNAVATMHHNGSAVGVALASASMG	663
TM			
C-Delta-1	624	NKKVDFHSD-NSDKNGYKVRYPVSVDYNLVHELKNEDSVKEEHGKCEAKCETYSDEAEKSA	683
X-Delta-1	617	NKKIDFLSESNNENKNGYKVRYPVSVDYNLVHELKNEDSPKEERSKCEAKC SSSNDSDSEIDVNS	677
Delta	664	GKTGSNSGLTFDGGNPNIIKNTWDKSVN-NICASAAAAAAAAAAAADECLMYGGYVAVSADN	723
C-Delta-1	684	-----VQLKSSDTSERK-----RPDSVYSTSKDTKYQSVYVIS E KDECIIATEV	728
X-Delta-1	678	-----VHSK-RDSSER-----RPDSAYSTSKDTKYQSVYVIS D E KDECIIATEV	721
Delta	724	NNANSDFCVAPLQRAKSQKQLNTDPTLHMRGSPAGTS AKGASGGGPGAAEGKRISVLGEGS	784
Delta	785	YCSQRWPSLAAAGVAGACSSQLMAAASAAAGTDGTAQQQRSVVCCTPHM	832

FIG. 3

$\begin{matrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 & 11 & 12 & 13 & 14 & 15 & 16 & 17 & 18 & 19 & 20 & 21 & 22 & 23 & 24 & 25 & 26 & 27 & 28 & 29 & 30 & 31 & 32 & 33 & 34 & 35 & 36 & 37 & 38 & 39 & 40 & 41 & 42 & 43 & 44 & 45 & 46 & 47 & 48 & 49 & 50 & 51 & 52 & 53 & 54 & 55 & 56 & 57 & 58 & 59 & 60 & 61 & 62 & 63 & 64 & 65 & 66 & 67 & 68 & 69 & 70 & 71 & 72 & 73 & 74 & 75 & 76 & 77 & 78 & 79 & 80 & 81 & 82 & 83 & 84 & 85 & 86 & 87 & 88 & 89 & 90 & 91 & 92 & 93 & 94 & 95 & 96 & 97 & 98 & 99 & 100 \end{matrix}$

FIG. 4



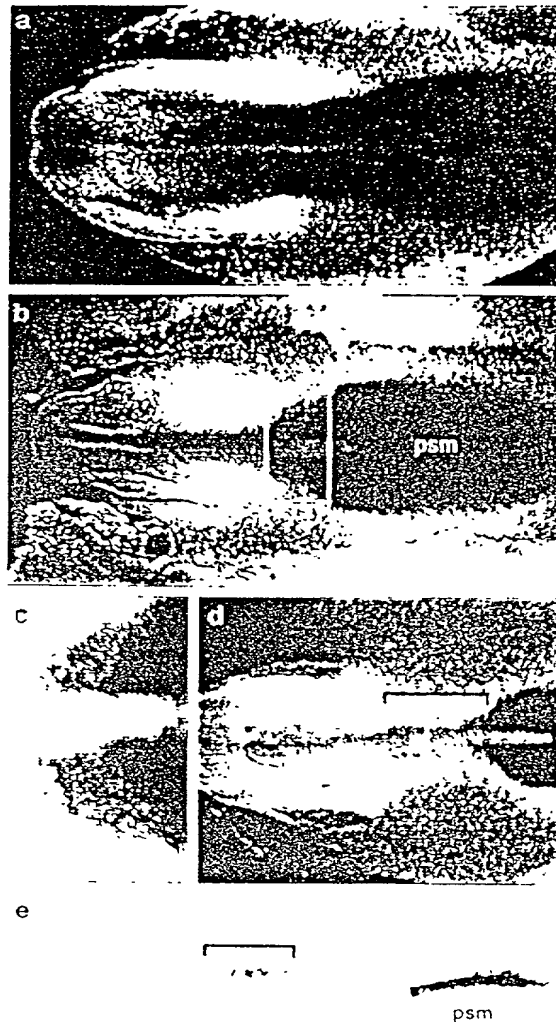


FIG. 5

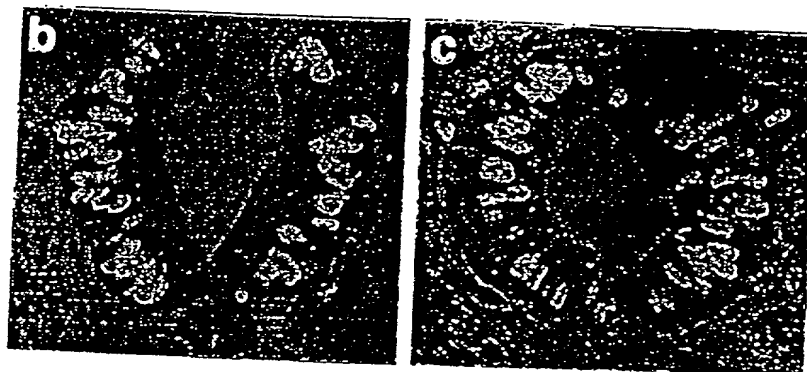


FIG. 6B

FIG. 6C

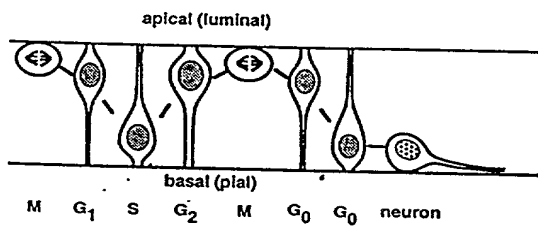


FIG. 6A

7326-038-19

CTGCAGGAAT	TCSMYCGCAT	GCTCCCGGCC	GCCATGGGCC	GTCGGAGCGC	GCTAGCCCTT	60
GCCGTGGTCT	CTGCCCTGCT	GTGCCAGGTC	TGGAGCTCCG	GCGTATTTGA	GCTGAAGCTG	120
CAGGAGTTTCG	TCAACAAGAA	GGGGCTGCTG	GGGAACCGCA	ACTGCTGCCG	CGGGGGCTCT	180
GGCCCCGCCTT	GCGCCTGCAG	GACCTTCTTT	CGCGTATGCC	TCAAGCACTA	CCAGGCCAGC	240
GTGTCACCGG	AGCCACCCTG	CACCTACGGC	AGTGCCGTCA	CGCCAGTGCT	GGGTGTCGAC	300
TCCTTCAGCC	TGCCTGATGG	CGCAGGCATC	GACCCCGCCT	TCAGCAACCC	CATCCGATTTC	360
CCCTTCGGCT	TCACCTGGCC	AGGTACCTTC	TCTCTGATCA	TTGAAGCCCT	CCATACAGAC	420
TCTCCCGATG	ACCTCGCAAC	AGAAAACCCA	GAAAGACTCA	TCAGCCGCCT	GACCACACAG	480
AGGCACCTCA	CTGTGGGAGA	AGAAATGGTCT	CAGGACCTTC	ACAGTAGCGG	CCGCACAGAC	540
CTCCGGTACT	CTTACCGGTT	TGTGTGTGAC	GAGCACTACT	ACGGAGAAGG	TTGCTCTGTG	600
TTCTGCCGAC	CTCGGGATGA	CGCCTTTGGC	CACTTCACCT	GCGGGGACAG	AGGGGAGAAG	660
ATGTGCGACC	CTGGCTGGAA	AGGCCAGTAC	TGCACCTGACC	CAATCTGTCT	GCCAGGGTGT	720
GATGACCAAC	ATGGATACTG	TGACAAACCA	GGGGAGTGCA	AGTGCAGAGT	TGGCTGGCAG	780
GGCCGCTACT	GCGATGAGTG	CATCCGATAC	CCAGGTTGTC	TCCATGGCAC	CTGCCAGCAA	840
CCCTGGCAGT	GTAACCTGCCA	GGAAAGGCTGG	GGGGGCCTTT	TCTGCAACCA	AGACCTGAAC	900
TACTGTACTC	ACCATAAGCC	GTGCAGGAAT	GGAGCCACCT	GCACCAACAC	GGGCCAGGGG	960
AGCTACACAT	GTTCCTGCCG	ACCTGGGTAT	ACAGGTGCCA	ACTGTGAGCT	GGAAGTAGAT	1020
GAGTGTGCTC	CTAGCCCCCTG	CAAGAACGGA	GCGAGCTGCA	CGGACCTTGA	GGACAGCTTC	1080
TCTTGACCT	GCCCTCCCGG	CTTCTATGGC	AAGGTCTGTG	AGCTGAGCGC	CATGACCTGT	1140
GCAGATGGCC	CTTGCTTCAA	TGGAGGACGA	TGTTTCAGATA	ACCCTGACGG	AGGCTACACC	1200
TGCCATTGCC	CCTTGGGCTT	CTCTGGCTTC	AACTGTGAGA	AGAAGATGGA	TCTCTGCGGC	1260
TCTTCCCCCTT	GTTCTAACGG	TGCCAAGTGT	GTGGACCTCG	GCAACTCTTA	CCTGTGCCGG	1320
TGCCAGGCTG	GCTTCTCCGG	GAGGTACTGC	GAGGACAATG	TGGATGACTG	TGCCTCCTCC	1380
CCGTGTGCAA	ATGGGGGCAC	CTGCCGGGAC	AGTGTGAACG	ACTTCTCCTG	TACCTGCCCA	1440
CCTGGCTACA	CGGGCAAGAA	CTGCAGCGCC	CCTGTACGCA	GGTGTGAGCA	TGCACCCCTGC	1500
CATAATGGGG	CCACCTGCCA	CCAGAGGGGC	CAGCGCTACA	TGTGTGAGTG	CGCCCAGGGC	1560
TATGGCGGCC	CCAACCTGCCA	GTTTCTGCTC	CCTGAGCCAC	CACCAGGGCC	CATGGTGGTG	1620
GACCTCAGTG	AGAGGCATAT	GGAGAGCCAG	GGCGGGCCCT	TCCCCTGGGT	GGCCGTGTGT	1680
GCCGGGGTGG	TGCTTGTCTC	CCTGCTGCTG	CTGGGCTGTG	CTGCTGTGGT	GGTCTGCGTC	1740
CGGCTGAAGC	TACAGAAACA	CCAGCCTCCA	CCTGAACCCCT	GTGGGGGAGA	GACAGAAACC	1800
ATGAACAACC	TAGCCAATTG	CCAGCGCGAG	AAGGACGTTT	CTGTTAGCAT	CATTGGGGCT	1860
ACCCAGATCA	AGAACACCAA	CAAGAAGGCG	GACTTTTCACG	GGGACCATGG	AGCCGAGAAG	1920
AGCAGCTTTA	AGGTCCGATA	CCCCACTGTG	GACTATAACC	TCGTTTCGAGA	CCTCAAGGGA	1980
GATGAAGCCA	CGGTCAGGGA	TACACACAGC	AAACGTGACA	CCAAGTGCCA	GTCACAGAGC	2040
TCTGCAGGAG	AAGAGAAGAT	CGCCCCAACA	CTTAGGGGTG	GGGAGATTCC	TGACAGAAAA	2100
AGGCCAGAGT	CTGTCTACTC	TACTTCAAAG	GACACCAAGT	ACCAGTCGGT	GTATGTTCTG	2160
TCTGCAGAAA	AGGATGAGTG	TGTTATAGCG	ACTGAGGTGT	AAGATGGAAG	CGATGTGGCA	2220
AAATTCCCAT	TTCTCTTAAA	TAAAATTCCT	AGGATATAGC	CCCGATGAAT	GCTGCTGAGA	2280
GAGGAAGGGA	GAGGAAACCC	AGGGACTGCT	GCTGAGAACC	AGGTTTCAGG	GAACGTGGTT	2340
CTCTCAGAGT	TAGCAGAGGC	GCCCCGACACT	GCCAGCCTAG	GCTTTGGCTG	CCGCTGGACT	2400
GCCTGCTGGT	TGTTCCCATTT	GCACTATGGA	CAGTTGCTTT	GAAGAGTATA	TATTTAAATG	2460
GACGAGTGAC	TTGATTCTATA	TAGGAAGCAC	GCACTGCCCC	CACGTCTATC	TTGGATTACT	2520
ATGAGCCAGT	CTTTCCTTGA	ACTAGAAACA	CAACTGCCTT	TATTGTCCTT	TTTGATACTG	2580
AGATGTGTTT	TTTTTTTTTTC	CTAGACGGGA	AAAAGAAAAC	GTGTGTTATT	TTTTTTGGGA	2640
TTTGTAACAAA	TATTTTTTCAT	GATTATGGGA	GAGCTCCCAA	CGCGTTGGAG	GT	2692

FIG. 7

MGRRSALALA VVSALLCQVW SSGVFELKLQ EFVNKKGLLG NRNCCRGSG	50
PPCACRTFFR VCLKHYQASV SPEPPCTYGS AVTPVLGVDS FSLPDGAGID	100
PAFSNPIRFP FGFTWPGTFS LIIEALHTDS PDDLATENPE RLISRLTTQR	150
HLTVGEEWSQ DLHSSGRTDL RYSYRFVCDE HYYGEGCSVF CRPRDDAFGH	200
FTCGDRGEKM CDPGWKGQYC TDPICLPGCD DQHGCDKPG ECKCRVGWQG	250
RYCDECIRYP GCLHGTCQQP WQCNCQEGWG GLFCNQDLNY CTHHKPCRNG	300
ATCTNTGQGS YTCSCRPGYT GANCELEVDE CAPSPCKNGA SCTDLED\$FS	350
CTCPPGFY GK VCELSAMTCA DGPCFNGGRC SDNPDGGYTC HCPLGFSGFN	400
CEKKMDLCGS SPCSNGAKCV DLGNSYLCRC QAGFSGRYCE DNVDDCASSP	450
CANGGTCRDS VNDFSCTCPP GYTGNCSAP VSRCEHAPCH NGATCHQRGQ	500
RYMCECAQGY GGPNCQFLLP EPPPGPMVVD LSRHMESQG GPFPWVAVCA	550
GVVLVLLLLL GCAAVVVCVR LKLQKHQPPP EPCGGETETM NNLANCQREK	600
DVSVSIIGAT QIKNTNKKAD FHGDHGAES SFKVRYPTVD YNLVRDLKGD	650
EATVRDTHSK RDTKCQSQS AGEKIAPTL RGGEIPDRKR PESVYSTSKD	700
TKYQSVYVLS AEKDECVIAT EV	722

FIG. 8

Chick DELTA	VGRRFLTAAFLSALTACQV	VGSGVFELKQGFVWKKGLT	NRNCGRGG	50								
Mouse Delta.pep	VGRRFAMTAAVLSAMTQ--	VNSGVFELKQGFVWKKGLT	NRNCGRGG	48								
Consensus	VGRRFLTAAFLSALTACQV	VGSGVFELKQGFVWKKGLT	NRNCGRGG	50								
Chick DELTA	GPGGAGGQQQDGR	DEFRVGLKHVOASVSPE	PPCTVGSALPVLGASFS	100								
Mouse Delta.pep	--SGP--PAGG	DEFRVGLKHVOASVSPE	PPCTVGSALPVLG/DGFS	93								
Consensus	...D....C...	DEFRVGLKHVOASVSPE	PPCTVGSALPVLGASFS	100								
Chick DELTA	PDGAGADPAFSNRIREFEG	ETWPGTFSLT	TEALHTDSPD	DLTENPERL	150							
Mouse Delta.pep	PDGAGADPAFSNRIREFEG	ETWPGTFSLT	TEALHTDSPD	DLTENPERL	142							
Consensus	PDGAGADPAFSNRIREFEG	ETWPGTFSLT	TEALHTDSPD	DLTENPERL	150							
Chick DELTA	TSRLTORHLVGEWSODL	HSSGRIDL	SYREVCDEHY	YGGCSVPCR	200							
Mouse Delta.pep	TSRLTORHLVGEWSODL	HSSGRIDL	SYREVCDEHY	YGGCSVPCR	192							
Consensus	TSRLTORHLVGEWSODL	HSSGRIDL	SYREVCDEHY	YGGCSVPCR	200							
Chick DELTA	PRDDFGHFTCGGRGK	PGWKQGYCT	PICLPGCD	DHGS	SDKPGEC	250						
Mouse Delta.pep	PRDDFGHFTCGGRGK	PGWKQGYCT	PICLPGCD	DHGS	SDKPGEC	242						
Consensus	PRDDFGHFTCGGRGK	PGWKQGYCT	PICLPGCD	DHGS	SDKPGEC	250						
Chick DELTA	KCRVGNQGRY	CDEGIRYPGC	LHGTCQOPWQ	CNCOEGWGGL	FCNODLNYCT	300						
Mouse Delta.pep	KCRVGNQGRY	CDEGIRYPGC	LHGTCQOPWQ	CNCOEGWGGL	FCNODLNYCT	292						
Consensus	KCRVGNQGRY	CDEGIRYPGC	LHGTCQOPWQ	CNCOEGWGGL	FCNODLNYCT	300						
Chick DELTA	HHKPCNGATCTNTGQGSYT	CSCRPGYTG	SDELENECD	ANPCKNGASC	350							
Mouse Delta.pep	HHKPCNGATCTNTGQGSYT	CSCRPGYTG	ABELDECA	PSPCKNGASC	342							
Consensus	HHKPCNGATCTNTGQGSYT	CSCRPGYTG	DELEEC	..PCKNGASC	350							
Chick DELTA	TDLENSCTCPPGFYGK	ELSAMTCADG	PCFNNGRC	DPDGGY	DR	400						
Mouse Delta.pep	TDLENSCTCPPGFYGK	ELSAMTCADG	PCFNNGRC	DPDGGY	DR	392						
Consensus	TDLENSCTCPPGFYGK	ELSAMTCADG	PCFNNGRC	DPDGGY	DR	400						
Chick DELTA	PLGSGFNCEKKID	SSSPC	NGACV	VDL	GNSY	COA	GF	GR	CDN	450		
Mouse Delta.pep	PLGSGFNCEKKID	SSSPC	NGACV	VDL	GNSY	COA	GF	GR	CDN	442		
Consensus	PLGSGFNCEKKID	SSSPC	NGACV	VDL	GNSY	COA	GF	GR	CDN	450		
Chick DELTA	VDDCASFCV	NGGTC	DN	D	SCTCP	PGY	GNKCS	EVS	ROEH	ECHNG	500	
Mouse Delta.pep	VDDCASFCV	NGGTC	DN	D	SCTCP	PGY	GNKCS	EVS	ROEH	ECHNG	492	
Consensus	VDDCASFCV	NGGTC	DN	D	SCTCP	PGY	GNKCS	EVS	ROEH	ECHNG	500	
Chick DELTA	ATCHERBNRY	CECA	GYGG	NCQFL	LP	PE	PE	VD	FT	EKYTE	INSQ	550
Mouse Delta.pep	ATCHERBNRY	CECA	GYGG	NCQFL	LP	PE	PE	VD	FT	ERHME	OGGP	542
Consensus	ATCHERBNRY	CECA	GYGG	NCQFL	LP	PE	PE	VD	FT	E...E...D...	550	
Chick DELTA	EPWAVOAGE	VLVL	LLGC	AA	VVCVRLK	OKRH	HO	PEA	ERS	ET	ETMNN	600
Mouse Delta.pep	EPWAVOAGE	VLVL	LLGC	AA	VVCVRLK	OKRH	HO	PEA	ERS	ET	ETMNN	592
Consensus	EPWAVOAGE	VLVL	LLGC	AA	VVCVRLK	OK...	PE	...	ET	ETMNN	600	
Chick DELTA	LANCOREKDI	S	SLIGATOI	KNTNKK	DFH	DN	SDK	IGY	KVRY	VDYN	649	
Mouse Delta.pep	LANCOREKDI	S	SLIGATOI	KNTNKK	DFH	DN	SDK	IGY	KVRY	VDYN	642	
Consensus	LANCOREKDI	S	SLIGATOI	KNTNKK	DFH	DN	SDK	IGY	KVRY	VDYN	650	
Chick DELTA	LVHEKNE	SVKEER	KCE	AKCETYD	SEA	BEK	SV	OL	KS	SITS	ERKRP	698
Mouse Delta.pep	LVHEKNE	SVKEER	KCE	AKCETYD	SEA	BEK	SV	OL	KS	SITS	ERKRP	692
Consensus	LVHEKNE	SVKEER	KCE	AKCETYD	SEA	BEK	SV	OL	KS	SITS	ERKRP	700
Chick DELTA	SVYSTSKDTP	YQSVYV	S	E	KDEC	IATEV	728					
Mouse Delta.pep	SVYSTSKDTP	YQSVYV	S	E	KDEC	IATEV	722					
Consensus	SVYSTSKDTP	YQSVYV	S	E	KDEC	IATEV	730					

FIG. 9

10	20	30	40	50	60
TACGATGAAY	AACCTGGCGA	ACTGCCAGCG	TGAGAAGGAC	ATCTCAGTCA	GCATCATCGG
Y D E	X P G E	L P A	* E G	H L S Q	H H R>
T M N	N L A	N C Q R	E K D	I S V	S I I G>
R * X	T W R	T A S	V R R T	S Q S	A S S>
70	80	90	100	110	120
	*		*		*
GGCYACGTCA	GATCARGAAC	ACCAACAAGA	AGGCGGACTT	YMCASCGGGG	GACCASAGCG
G X V	R S X T	P T R	R R T	X X R G	T X A>
A T S	D Q E	H Q Q E	G G L	X X G	G P X R>
G X R Q	I X N	T N K	K A D F	X X G	D X S>
130	140	150	160	170	180
	*		*		*
TCCGACAAGA	ATGGMITTCA	AGGCCCGCTA	CCCCAGCGTG	GACTATAACT	CGTGCAGGAC
S D K	N G F Q	G P L	P Q R	G L * L	V Q D>
P T R	M X F	K A R Y	P S V	D Y N	S C R T>
V R Q E	W X S	R P A	T P A W	T I T	R A G>
190	200	210	220	230	240
	*		*		*
CTCAAGGGTG	ACGACACCGC	CGTCAGGACG	TCGCACAGCA	AGCGTGACAC	CAAGTGCCAG
L K G	D D T A	V R T	S H S	K R D T	K C Q>
S R V	T T P	P S G R	R T A	S V T	P S A S>
P Q G *	R H R	R Q D	V A Q Q	A * H	Q V P>
250	260	270	280	290	300
	*		*		*
TCCCCAGGCT	CCTCAGGGAG	GAGAAGGGGA	CCCCGACCAC	ACTCAGGGGK	TGCGTGCTGC
S P G	S S G R	R R G	P R P	H S G X	A C C>
P Q A	P Q G	G E G D	P D H	T Q G	X R A A>
V P R L	L R E	E K G	T P T T	L R G	C V L>
310	320	330	340	350	360
	*		*		*
GGGCGGGGCT	CAGGAGGGGG	TACCTGGGGG	GTGTCTTTCCT	GGAACCACTG	CTCCGTTTCT
G P G	S G G G	T W G	V S S	W N H C	S V S>
G R A	Q E G	V P G G	. C L P	G T T	A P F L>
R A G L	R R G	Y L G	G V F L	E P L	L R F>

```

      370      380      390      400      410      420
      *      *
CTTCCCAAAT GTTCTCATGC ATTTCATGTG GATTTTCTCT ATTTTCCTTT TAGTGGAGAA
  L P K C S H A F I V D F L Y F P F S G E>
  F P N V L M H S L W I F S I F L L V E K>
S S Q M F S C I H C G F S L F S F * W R>

      430      440      450      460      470      480
      *      *
GCATCTGAAA GAAAAAGGCC GGACTCGGGC TGTTCAACTT CAAAAGACAC CAAGTACCAG
  A S E R K R P D S G C S T S K D T K Y Q>
  H L K E K G R T R A V Q L Q K T P S T S>
S I * K K K A G L G L F N F K R H Q V P>

      490      500      510      520
      *      *
TCGGTGTACG TCATATCCGA GGAGAAGGAC GAGTGCGTCA TCGCA
  S V Y V I S E E K D E C V I A>
  R C T S Y P R R R T S A S S>
V G V R H I R G E G R V R H R>

```

FIG. 10 (cont'd)

[illegible]

FIG. 11



```

      10      20      30      40      50      60
      *      *      *      *      *      *
CATTGGGTAC GGGCCCCCT CGAGGTCGAC GGTATCGATA AGCTTGATAT CGAATTCGG
      70      80      90     100     110     120
      *      *      *      *      *      *
CTTCACCTGG CCGGGCACCT TCTCTCTGAT TATTGAAGCT CTCCACACAG ATTCTCCTGA
      130     140     150     160     170     180
      *      *      *      *      *      *
TGACCTCGCA ACAGAAAACC CAGAAAGACT CATCAGCCGC CTGGCCACCC AGAGGCACCT
      190     200     210     220     230     240
      *      *      *      *      *      *
GACGTTGGGC GAGGAGTGGT CCCAGGACCT GCACAGCAGC GGCCGCACGG ACCTCAAGTA
      250     260     270     280     290     300
      *      *      *      *      *      *
CTCCTACCGC TTCGTGTGTC ACCAACACTA CTACGGAGAG GGCTGCTCCG TTTTCTOCCG
      310     320     330     340     350     360
      *      *      *      *      *      *
TCCCCGGGAC GATGCCTTCG GCCACTTCAC CTGTGGGGAG CGTGGGGAGA AAGTGTGCAA
      370     380     390     400     410     420
      *      *      *      *      *      *
CCCTGGCTCG AAAGGGCCCT ACTGCACAGA GCCGATCTGC CTGCCTGGAT GTGATGAGCA
      430     440     450     460     470     480
      *      *      *      *      *      *
GCATGGATTT TGTGACAAAC CAGGGGAATC CAAGTGCAGA GTGGGCTGGC AGGGCCGGTA
      490     500     510     520     530     540
      *      *      *      *      *      *
CTGTGACGAG TGTATCCGCT ATCCAGGCTG TCTCCATGGC ACCTGCCAGC AGCCCTGGCA
      550     560     570     580     590     600
      *      *      *      *      *      *
GTGCAACTGC CAGGAAGGNT GGGGGGUCCT TTTCTGCAAC CAGGACCTGA ACTACTGCAC
      610     620     630     640     650     660
      *      *      *      *      *      *
ACACCATTAAG CCTTGCAAGA ATGGAGCCAC CTGCAACAAA CACGGGCCAG GGGGAGCTAC
      670     680     690     700     710     720
      *      *      *      *      *      *
ACTTGGTCTT TGGCCGGNCT GGGGTACANA GGGTGCCACC TGCGAAGCTT GGGGATTGGA
      730     740     750     760     770     780
      *      *      *      *      *      *
CGAGTTGTTG ACCCCAGCCC TTGGTAAGAA CGGAGGGAGC TTGACGGATC TTCCGAGAAC
      790     800     810     820     830     840
      *      *      *      *      *      *
AGCTACTCCT GTACCTGCCC ACCCGGCTTC TACGCCAAAA TTGTTGATTT GAGTGCCATG
      850     860     870     880     890     900
      *      *      *      *      *      *
ACCTGTGCGG ACGGCCCTTG CTTTAACGGG GGTGCGTGCT CAGACAGCCC CGATGGAGGG

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FIG. 12A

```

      910      920      930      940      950      960
      *      *      *      *      *      *
TACAGCTGCC GCIGCCCCGT GGGCTACTCC GGCTTCAACT' GTGAGAAGAA AATTGACTAC

      970      980      990      1000      1010      1020
      *      *      *      *      *      *
TGCAGCTCTT CACCCTGTTC TAATGGTCCC AAGTGTGTGG ACCTCGGTGA TGCTTACCTG

      1030      1040      1050      1060      1070      1080
      *      *      *      *      *      *
TGCCGCTGCC AGGCCGGCTT CTCGGGGAGG CACTGTGACG ACAACGTGGA CGACTGCGCC

      1090      1100      1110      1120      1130      1140
      *      *      *      *      *      *
TCCTCCCCGT GCGCCAACGG GGGCACCTGC CGGGATGGCG TGAACGACTT CTCCTGCAUC

      1150      1160      1170      1180      1190      1200
      *      *      *      *      *      *
TGCCCGCCIG GCTACACGGG CAGGAACGTC AGTGCCCCCG CCAGCAGCTG CGAGCACGCA

      1210      1220      1230      1240      1250      1260
      *      *      *      *      *      *
CCCTGCCACA ATGGGGCCAC CTGCCACGAG AGGGGCCACC GCTATNTGTG CGAGIGIGCC

      1270      1280      1290      1300      1310      1320
      *      *      *      *      *      *
CGAAGCTACG GGGGTCCCAA CTUCCAN'TC CTGCTCCCCG AAAC'IGCCCC CCCGGCCCCA

      1330      1340      1350      1360      1370      1380
      *      *      *      *      *      *
CGGTGGTGGA AAC'CCCCTA AAAAAACCTA AAAGGGCCGG GGGGGGCCCA TCCCC'ITGGT

      1390      1400      1410      1420      1430      1440
      *      *      *      *      *      *
GGACGTGTGC GCCGGGGTCA TCC'ITGTCT CATGCTGCTC CTGGGCTGTG CCGCTGTGGT

      1450      1460      1470      1480      1490      1500
      *      *      *      *      *      *
GGTCTGCGTC CGGCTGAGGC TGCAGAAGCA CCGCCCCCA CCCGACCCCT GNCGGGGGGA

      1510      1520      1530      1540      1550      1560
      *      *      *      *      *      *
GACGGAGACC ATGAACAACC TGGNCAACTG CCAGCGIGAG AAGGACATCT CAGTCAGCAT

      1570      1580      1590      1600      1610      1620
      *      *      *      *      *      *
CATCGGGGNC ACGCAGATCA AGAACACCAA CAAGAAGGCG GACTTCCACG GGGACCACAG

      1630      1640      1650      1660      1670      1680
      *      *      *      *      *      *
NGCCGACAAG AATGGCTTCA AGGCCCGCTA CCCAGNGGTG GACTATAACC TCGTGCAGGA

      1690      1700      1710      1720      1730      1740
      *      *      *      *      *      *
CC'ICAAGGGT GACGACACCG CCGTCAGGCA CGCGCACAGC AAGCGTGACA CCAAGTGNCA

      1750      1760      1770      1780      1790      1800
      *      *      *      *      *      *
GCCCCAGGGC TCCTCAGGGG AGGAQAAGGG GACCCCGAC CCACACTCAG GGGGTGGAGG

      1810      1820      1830      1840      1850      1860
      *      *      *      *      *      *

```

FIG. 12A (cont'd)

AAGCATCTTG AAAGAAAAG GCCGGACTTC GGGCTTG'TC AACTTTCAA AGACAANCAA

1870 1880 1890 1900 1910 1920  
\* \* \* \* \*  
NGTACAAGTC GGTGTCGTC ATTTCCGNAG GAGGAAGGNT GACTGCGTCA TÀGGAANTTG

1930            1940            1950            1960            1970            1980  
\*       \*       \*       \*       \*       \*       \*       \*       \*       \*  
AGGTNGTAAA NTCGNAGTTG ANNTTTCAAA GNNNTCCCGG GATTCCGNTT TCAAAGTTTT

T

FIG. 12A (cont'd)

[illegible]

10 20 30 40 50 60 a.a. no.  
 CATTCGGTAC GGGCCCCCT CGAGGTCGAC GGTATCGATA AGCTTGATAT CGAATTCGG  
 H W V R A P L E V D G I D K L D I E F R> 20  
 I G Y G P P S R S T V S I S L I S N S G> 20  
 L G T G P P R G R R Y R \* A \* Y R I P> 19  
 70 80 90 100 110 120  
 CTTCACTGG CCGGCACCT TCTCTGTGAT TATTGAAGCT CTCCACACAG ATTCTCTGA  
 L H L A G H L L S D Y \* S S P H R F S > 40  
 F T W P G T F S L I I E A L H T D S P D> 40  
 A S P G R A P S L \* L L K I. S T Q I L L> 39  
 130 140 150 160 170 180  
 TGACCTCGCA ACAGAAACC CAGAAAGACT CATCAGCCGC CTGGCCACCC AGAGGCACCT  
 \* P R N R K P R K T H Q P P G H P E A P> 60  
 D L A T E N P E R L I S R L A T Q R H L> 60  
 M T S Q Q K T' Q K D S S A A W P P R - G T> 59  
 190 200 210 220 230 240  
 GACGGTGGGC GAGGAGTGGT CCCAGGACCT GCACAGCAGC GGCCGCACGG ACCTCAAGTA  
 D G G R G V V P G P A Q Q R P H G P Q V> 80  
 T V G E E W S Q D L H S S G R T D L K Y> 80  
 \* R W A R S G P R T C T A A A A R T S S> 79  
 250 260 270 280 290 300  
 CTCCTACCGC TTCGTGTGTG ACGAACACTA CTACGGAGAG GGCTGCTCCG TTTTCTGCCG  
 L L P L R V \* R T' L L R R G L L R F L P> 100  
 S Y R F V C D E H Y Y R E G C S V F S R> 100  
 T P T A S C V T N T T T E R A A P F S A> 99  
 310 320 330 340 350 360  
 TCCCCGGGAC GATGCCTTCG GCCACTTCAC CTCTGGGGAG CGTGGGGAGA AAGTGTGCAA  
 S P G R C L R P L H L W G A W G E S V Q> 120  
 P R D D A F G H F T C G E R G E K V C N> 120  
 V P G T' M P S' A T S P V C S V G R K C A> 119  
 370 380 390 400 410 420  
 CCCTGGCTGG AAAGGGCCCT ACTGCACAGA GCCGATCTGC CTGCCTGGAT GTGATGAGCA  
 P W L E R A L L H R A D L P A W M \* \* A> 140  
 P G W K G P Y C T E F L C L P G C D E Q> 140  
 T I. A G K G P T A Q S R S A C L D V M S> 139  
 430 440 450 460 470 480  
 GCATGGATTT TGTGACAAAC CAGCCCAATG CAAGTGCAGA GTGGGCTGGC AGGGCCCGTA  
 A W I L \* Q T R G M Q V Q S G L A G P V> 160  
 H G F C D K P G E C K C R V G W Q G R Y> 160  
 S M D F V T N Q G N A S A E W A G R A G> 159  
 490 500 510 520 530 540  
 CTGTGACGAG TGTATCCGCT ATCCAGGCTG TCTCCATGGC ACCTGCCAGC AGCCCTGGCA  
 L \* R V Y P L S R L S P W H L P A A L A> 180

FIG. 12B

 00703234-03434  
 005400-000000

C D E C I R Y P G C L H G T C Q Q P W O> 180  
 T V T S V S A I Q A V S M A P A S S P G> 179  
 550 560 570 580 590 600  
 \* \* \* \* \*  
 GTCGAAGTGC CAGGAAGGNT GGGGGGGCCT TTTCTGCAAC CAGGACCTGA ACTACTGCAC  
 V Q L P G R X G G P F L Q P G P E L L H> 200  
 C N C Q E G W G G L F C N Q D L N Y C T> 200  
 S A T A R K X G G A F S A T R T \* T T A> 199  
 610 620 630 640 650 660  
 \* \* \* \* \*  
 ACACCATAAG CCTGCAAGA ATCGAGCCAC CTGCAACAAA CACGGGCCAG GGGGAGCTAC  
 T P \* A L Q E W S H L Q Q T R A R G S Y> 220  
 H H K P C K N G A T C N K H G P G G A T> 220  
 H T I S P A R M E P P A T N T G Q G E L> 219  
 670 680 690 700 710 720  
 \* \* \* \* \*  
 ACTTGGTCTT TGCCCGGNCI GGGGTACANA GGGTGCCACC TGCGAAGCTT GGGGATTGGA  
 T W S L A G L G Y X G C H L R S L G I G> 240  
 L G L W P X W G T X G A T C E A W G L D> 240  
 H L V F G R X C V X R V P P A K L G D W> 239  
 730 740 750 760 770 780  
 \* \* \* \* \*  
 CGAATTGTTG ACCCCAGCCC TTGTAAGAA CGGAGGGAGC TTGACGGATC TTCGAGAAGC  
 R V V D P S P W \* E R R E L D G S S E N> 260  
 E L L T P A L G K N G G S L T D L R R T> 260  
 T S C \* P Q P L V R T E O A \* R I F G E> 259  
 790 800 810 820 830 840  
 \* \* \* \* \*  
 AGCTACTCCT GTACCTGCC ACCCGGCTTC TACGGCAAAA TCTGTGAATT GAGTGCCATG  
 S Y S C T C P P G F Y G K I C E L S A M> 280  
 A T P V P A H P A S T A K S V N \* V P > 280  
 Q L L L Y L P T R L L R Q N L \* I E C H> 279  
 850 860 870 880 890 900  
 \* \* \* \* \*  
 ACCTGTGCGG ACGGCCCTTG CTTTAACGGG GGTGGGTGCT CAGACAGCCC CGATGGAGGG  
 T C A D G P C F N G G R C S D S P D G G> 300  
 P V R T A L A L T G V G A Q T A P M E G> 300  
 D L C G R P L L \* R G S V I R Q P R W R> 299  
 910 920 930 940 950 960  
 \* \* \* \* \*  
 TACAGCTGCC GCTGCCCGT GGGCTACTCC GCGTTCAACT GTGAGAAGAA AATTGACTAC  
 Y S C R C P V G Y S G F N C E K K I D Y> 320  
 T A A A A P W A T P A S T V R R K L T T> 320  
 V Q L P L P R G L L R L Q L \* E E N \* L> 319  
 970 980 990 1000 1010 1020  
 \* \* \* \* \*  
 TGCAGCTCTT CACCCGTTC TAAAGGAGCC AAGTCTGTGG ACCTCGGTGA TGCCCTACCTG  
 C S S S P C S N G A K C V D L G D A Y L> 340  
 A A L H P V L M V P S V W T S V M P T C> 340  
 I Q L F T L F \* W C Q V C G P R \* C L P> 339  
 1030 1040 1050 1060 1070 1080  
 \* \* \* \* \*  
 TGCCGCTGCC AGGCCGCTT CTCGGCGAGG CACTGTGACG ACAACGTGGA CGACTGCGCC

FIG. 12B (cont'd)

C R C Q A G F S G R H C D D N V D D C A> 360  
 A A A R P A S R G G T V T T T W T T A P> 360  
 V P L P G R L L C F A L \* R Q R G R L R> 359  
 1090 1100 1110 1120 1130 1140  
 \* \* \* \* \*  
 TCC'ICCCCGT GCGCCAACGG GGGCACCTGC CGGGATGGCG TGAACGACTT CTCCTGCACC 380  
 S S F C A N G G T C R D G V N D F S C T> 380  
 P F R A P T G A P A G M A \* T T S P A P> 380  
 L L P V R Q R G H L P G W R F R I L L H> 379  
 1150 1160 1170 1180 1190 1200  
 \* \* \* \* \*  
 TGCCCGCCTG GCTACACGGG CAGGAACCTGC AGTCCCCCG CCAGCAGG'YG CCAGCACGCA 400  
 C P P G Y T G R N C S A P A S R C E H A> 400  
 A R L A T R A G T A V P P P A G A S T H> 400  
 L P A W L H G Q E L Q C P R Q Q V R A R> 399  
 1210 1220 1230 1240 1250 1260  
 \* \* \* \* \*  
 CCCTGCCACA ATGGGGCCAC CTGCCACGAG AGGGGCCACC GCTATNIGTG CGAGTGTGCC 420  
 P C H N G A T C H F R G H R Y X C E C A> 420  
 P A T M G P P A T R G A T A T C A S V P> 420  
 T L P Q W G H L P R E G P P L F V R V C> 419  
 1270 1280 1290 1300 1310 1320  
 \* \* \* \* \*  
 CGAAGCTACG GGGGTCCCA CTGCCNTTC CTGCTCCCCG AAAGTCCCCC CCGGGCCCCA 440  
 R S Y G G P N C X F L L P E T A P P A P A> 440  
 E A T G V P T A X S C S P K L P P R P H> 440  
 P K L R G S Q L P X P A P R N C P P G P> 439  
 1330 1340 1350 1360 1370 1380  
 \* \* \* \* \*  
 CGGTGGTGGG AACTCCCCTA AAAAAACCTA AAAGGGCCCG GGGGGGCCCA TCCCCTGTGT 460  
 R W W K L P \* K N L K G P G G A H P L G> 460  
 G G G N S P K K T \* K G R G G P I P L V> 460  
 T V V F T P L K K P K R A G G G P S P W> 459  
 1390 1400 1410 1420 1430 1440  
 \* \* \* \* \*  
 GGACGTGTGC GCGGGGTCA TCC'ITGTCCT CATGCTGTGC CTGGGCTGTC CCGCTGTGGT 480  
 G R V R R G H F C P H A A A G L C R C G> 480  
 D V C A G V I L V L M L L L G C A A V V> 480  
 W T C A P G S S L S S C C C W A V P L W> 479  
 1450 1460 1470 1480 1490 1500  
 \* \* \* \* \*  
 GGTCTGCGTC CCGCTGAGGC TGCAGAAGCA CGGGCCXXCA GCCGACCCCT GNCGGGGGGA 500  
 G L R P A F A A E A P A P S R P L X G G> 500  
 V C V R L R L Q K H R P P A D P X R G E> 500  
 W S A S G \* G C R S T G P Q P T P X G G> 499  
 1510 1520 1530 1540 1550 1560  
 \* \* \* \* \*  
 GACGAGACC ATGAACAACC TGGNCAAC'IG CCAGCGTGAG AAGGACATCT CAGTCAGCAT 520  
 D G D H E Q P G Q L P A \* E G H L S Q H> 520  
 T E T M N N L X N C Q R E K D I S V S I> 520  
 R R R P \* T T W X T A S V R R T S Q S A> 519  
 1570 1580 1590 1600 1610 1620  
 \* \* \* \* \*

FIG. 12B (cont'd)

CATCGGGGNC ACGCAGATCA AGAACACCAA CAAGAAGGCG GACTTCCACG GGGACCACAG  
 H R G H A D Q E H Q Q E G G L P R G P Q> 540  
I G X T Q I K N T N K K A D F H G D H X> 540  
 S S G X R R S R T P T R R R T S T G T T> 539

1630 1640 1650 1660 1670 1680  
 \* \* \* \* \*  
 NGCCGACAAG AATGGCTTCA AGGCCCGCTA CCCACNGGIG GACTATAACC TCGTGCAGGA  
 X R Q E W L Q G P L P X G G L \* P R A G> 560  
A D K N G F K A R Y P X V D Y N L V O D X> 560  
 X P T R M A S R P A T Q X W T I T S C R> 559

1690 1700 1710 1720 1730 1740  
 \* \* \* \* \*  
 CCTCAAGGCT GACGACACCG CCGTCAGGGA CGCGCACAGC AAGCUTGACA CCAAGTGNCA  
 P Q G \* R H R R Q G R A Q Q A \* H Q V X> 580  
L K G D D T A V R D A H S K R D T K X Q X> 580  
 T S R V T T P P S G T R T A S V T P S X> 579

1750 1760 1770 1780 1790 1800  
 \* \* \* \* \*  
 GCCCCAGGGC TCCTCAGGGG AGGAGAAGGG GACCCUCCAC CCACACTCAG GGGGTGGAGG  
 A P G L L R G G M Q D P R P T L R G W R> 600  
P O G S S G E E K G T P D P H S G G G G X> 600  
 S P R A P Q G R R R G P P T H T Q G V R> 599

1810 1820 1830 1840 1850 1860  
 \* \* \* \* \*  
 AAGCATCTTG AAAGAAAAAG GCCGGACTTC GGGCTTGTTT AACTTTCAAA AGACAANCAA  
 K H L E R K R P D F G L V Q L S K D X Q> 620  
 S I L K E K G R T S G L F N F Q K T X X> 620  
 E A S \* K K K A G L R A C S T F K R Q X> 619

1870 1880 1890 1900 1910 1920  
 \* \* \* \* \*  
 NGTACAAGTC GGTGTNCGTC ATTTCCGNAG GAGGAAGGNT GACTGCGTCA TAGGAANTIG  
 X T S R C X S F P X E E G \* L R H R X L> 640  
 V Q V G V R H F R R R K X D C V T G X \*> 640  
 X Y K S V X V I S X G G R X T A S \* E X> 639

1930 1940 1950 1960 1970 1980  
 \* \* \* \* \*  
 AGGTNGTAAA NTGGNAGTIG ANNTTGGAAG GNNNTCCCCO GATTCGNTT TCAAAGTTT  
 R X \* X G S \* X W K X X P G F R F Q S F> 660  
E V V X W X L X L E X X P R I P X S K F> 659

T

FIG. 12B (cont'd)

## Mouse Delta vs Partial Human Delta

Mouse Delta DNA	GTCCAGCGGT ACCATGGGCC GTGGAGCGC GCTAGCCCTT GCCGTGGTCT	50
Human Delta	-----	
Consensus	GTCCAGCGGT ACCATGGGCC GTGGAGCGC GCTAGCCCTT GCCGTGGTCT	50
Mouse Delta DNA	CTGCCCTGCT GTGCCAGGTC TGGAGCTCCG GCGTATTGA GCTGAAGCTG	100
Human Delta	-----	
Consensus	CTGCCCTGCT GTGCCAGGTC TGGAGCTCCG GCGTATTGA GCTGAAGCTG	100
Mouse Delta DNA	CAGGAGTTCG TCAACAAGAA GGGGCTGCTG GGGAAACCGCA ACTGCTGCCG	150
Human Delta	-----	
Consensus	CAGGAGTTCG TCAACAAGAA GGGGCTGCTG GGGAAACCGCA ACTGCTGCCG	150
Mouse Delta DNA	CGGGGGCTCT GCCCGCCCTT GCGCCTGCAG GACCTTCTTT CGCGTATGCC	200
Human Delta	-----	
Consensus	CGGGGGCTCT GCCCGCCCTT GCGCCTGCAG GACCTTCTTT CGCGTATGCC	200
Mouse Delta DNA	TCAAGCACTA CCAGGCCAGC GTGTCAACCG AGCCACCCTG CACCTACGGC	250
Human Delta	-----	
Consensus	TCAAGCACTA CCAGGCCAGC GTGTCAACCG AGCCACCCTG CACCTACGGC	250
Mouse Delta DNA	AGTGCTGTCA CGCCAGTGT GGTGTGAC TCCTTCAGCC TGCCTGATCG	300
Human Delta	-----	5
Consensus	AGTGCTGTCA CGCCAGTGT GGTGTGAC TCCTTCAGCC TGCCTGATCG	300
Mouse Delta DNA	CGGATGCA TC GACCTC -- G CTTTGGCA CCGCA--TCC GATTC--CCC	343
Human Delta	GGTATGGGC CCCCCTGAGG TCCCTGGTAT CATTAGCTT GATTTCAAT	55
Consensus	SGGAGGRYC SMCCCTGAGG TCCCTGGTAT CSMYRAGYVY GATTTGMMY	350
Mouse Delta DNA	TCGGCTTCA CCTGGCCGG TACCTTCTCT CTGATATTG AAGCTCTCA	393
Human Delta	TCGGCTTCA CCTGGCCGG TACCTTCTCT CTGATATTG AAGCTCTCA	105
Consensus	TCGGCTTCA CCTGGCCGG TACCTTCTCT CTGATATTG AAGCTCTCA	400
Mouse Delta DNA	TACAGATCT CCGATGACC TCGCAACAGA AAACCCAGAA AGACTCATCA	443
Human Delta	TACAGATCT CCGATGACC TCGCAACAGA AAACCCAGAA AGACTCATCA	155
Consensus	TACAGATCT CCGATGACC TCGCAACAGA AAACCCAGAA AGACTCATCA	450
Mouse Delta DNA	GCCGCTGAC CACACAGAGG CACCTACCG TGGGAGGA PTGGTCCAG	493
Human Delta	GCCGCTGAC CACACAGAGG CACCTACCG TGGGAGGA PTGGTCCAG	205
Consensus	GCCGCTGAC CACACAGAGG CACCTACCG TGGGAGGA PTGGTCCAG	500
Mouse Delta DNA	GACCTCACA GAGCGCCG CACGACCTC CGTACTCTT ACCGTTTGT	543
Human Delta	GACCTCACA GAGCGGCCG CACGACCTC AGTACTCTT ACCGTTTGT	255
Consensus	GACCTCACA GAGCGGCCG CACGACCTC AGTACTCTT ACCGTTTGT	550
Mouse Delta DNA	GTGTGACGAG CACTACTACG GAGAGGGTG CTCGTCTTC TGCCGACCTC	593
Human Delta	GTGTGACGAG CACTACTACG GAGAGGGTG CTCGTCTTC TGCCGACCTC	305
Consensus	GTGTGACGAG CACTACTACG GAGAGGGTG CTCGTCTTC TGCCGACCTC	600
Mouse Delta DNA	GGGATGATGC CTTGGCCAC TTCACCTG GGGATGAGG GGAGAAATG	643
Human Delta	GGGATGATGC CTTGGCCAC TTCACCTG GGGATGAGG GGAGAAATG	355
Consensus	GGGATGATGC CTTGGCCAC TTCACCTG GGGATGAGG GGAGAAATG	650

FIG. 13



## Mouse Delta vs Partial Human Delta

Mouse Delta DNA	TGCACCCCTG GCTGGAAAGG CACTACTGAC ACAGACCCA TCTGCTGCC	693
Human Delta	TGCACCCCTG CCTGGAAAGG CACTACTGAC ACAGACCCA TCTGCTGCC	405
Consensus	TGCACCCCTG GCTGGAAAGG CACTACTGAC ACAGACCCA TCTGCTGCC	700
Mouse Delta DNA	AGGTGTGAT GACCAACATG GATCTGTGA CAAACCAGGG GATGCAAGT	743
Human Delta	TGGTCTCAT GACCAACATG GATCTGTGA CAAACCAGGG GATGCAAGT	455
Consensus	AGGTGTGAT GACCAACATG GATCTGTGA CAAACCAGGG GATGCAAGT	750
Mouse Delta DNA	GCAGAGTGG CTGGCAGGGC CGTACTGAC AGAGTGAT CCGTATCCA	793
Human Delta	GCAGAGTGG CTGGCAGGGC CGTACTGAC AGAGTGAT CCGTATCCA	505
Consensus	GCAGAGTGG CTGGCAGGGC CGTACTGAC AGAGTGAT CCGTATCCA	800
Mouse Delta DNA	GGTGTCTCC ATGGCACCTG CCAGCAACC TGGCAGTGA ACTGCCAGGA	843
Human Delta	GGTGTCTCC ATGGCACCTG CCAGCAACC TGGCAGTGA ACTGCCAGGA	555
Consensus	GGTGTCTCC ATGGCACCTG CCAGCAACC TGGCAGTGA ACTGCCAGGA	850
Mouse Delta DNA	AGGTGGGGG GGCCTTTTCT GCAACCAAG CCGAACTAC TGTACTACC	893
Human Delta	AGGTGGGGG GGCCTTTTCT GCAACCAAG CCGAACTAC TGTACTACC	605
Consensus	AGGTGGGGG GGCCTTTTCT GCAACCAAG CCGAACTAC TGTACTACC	900
Mouse Delta DNA	ATAACCCCTG CAGGAATGGA GCCACCTGCA CCAACACGG GCCAGGGG	941
Human Delta	ATAACCCCTG CAGGAATGGA GCCACCTGCA CCAACACGG GCCAGGGG	655
Consensus	ATAACCCCTG CAGGAATGGA GCCACCTGCA CCAACACGG GCCAGGGG	950
Mouse Delta DNA	GCTACACCTG TCTCTT-GCC GACCTGGGT ATATA-GGTG CCAACTGAG	986
Human Delta	GCTACACCTG TCTCTTGGCC GACCTGGGT ATATAAGGTG CCAACTGCA	705
Consensus	GCTACACCTG TCTCTTGGCC GACCTGGGT ATATAAGGTG CCAACTGCA	1000
Mouse Delta DNA	AGCTTGGGA ATGAGAGAGT TGTGTCTCT AGCCCTTGC AAGAACGGAG	1031
Human Delta	AGCTTGGGA ATGAGAGAGT TGTGTCTCT AGCCCTTGC AAGAACGGAG	755
Consensus	AGCTTGGGA ATGAGAGAGT TGTGTCTCT AGCCCTTGC AAGAACGGAG	1050
Mouse Delta DNA	CGAGCTTAC GGAACCTT-G AGACAGCTT CTCCTGACC TGCCCTCCCG	1079
Human Delta	CGAGCTTAC GGAACCTTGG AGACAGCTA CTCCTGACC TGCCCTCCCG	805
Consensus	CGAGCTTAC GGAACCTTGG AGACAGCTT CTCCTGACC TGCCCTCCCG	1100
Mouse Delta DNA	GCTTCTAAG CAAATCTGT GATCTGAC CCAATGACCTG TGCAGAGGC	1129
Human Delta	GCTTCTAAG CAAATCTGT GATCTGAG CCAATGACCTG TGCAGAGGC	855
Consensus	GCTTCTAAG CAAATCTGT GATCTGAG CCAATGACCTG TGCAGAGGC	1150
Mouse Delta DNA	CCTTGCTTA ATGGGGGAC ATGCTCAGAT ATCCCTGAC GAGGTACAC	1179
Human Delta	CCTTGCTTA ATGGGGGGG ATGCTCAGAC ATCCCTGAT GAGGTACAG	905
Consensus	CCTTGCTTA ATGGGGGAC ATGCTCAGAT ATCCCTGAC GAGGTACAC	1200
Mouse Delta DNA	CTGCCATGC CCCCTGGGCT CTCCTGGCTT CAACTGTGAG AAGAAATAG	1229
Human Delta	CTGCCATGC CCCCTGGGCT CTCCTGGCTT CAACTGTGAG AAGAAATAG	955
Consensus	CTGCCATGC CCCCTGGGCT CTCCTGGCTT CAACTGTGAG AAGAAATAG	1250
Mouse Delta DNA	ATCTCTGCG CTCTTCCTT TGTCTAAG GTGCCAAGTG TGTGGACCTC	1279
Human Delta	ATCTCTGCG CTCTTCCTT TGTCTAAG GTGCCAAGTG TGTGGACCTC	1005
Consensus	ATCTCTGCG CTCTTCCTT TGTCTAAG GTGCCAAGTG TGTGGACCTC	1300

FIG. 13 (cont'd)

## Mouse Delta vs Partial Human Delta

Mouse Delta DNA	GGCAATCTTT ACCTGTGCCG TCCCAAGCT GGCTTCTCG GGAGGACTG	1329
Human Delta	GGTGATCTT ACCTGTGCCG TCCCAAGCT GGCTTCTCG GGAGGACTG	1055
Consensus	GGTATCTCT ACCTGTGCCG TCCCAAGCT GGCTTCTCG GGAGGACTG	1350
Mouse Delta DNA	CGAGGACAA GTGGATGACT GGGCTCTCT CCCGTGAGCA AAGGGGGCA	1379
Human Delta	TGAGGACAA GTGGATGACT GGGCTCTCT CCCGTGAGCA AAGGGGGCA	1105
Consensus	TGAAGACAA GTGGATGACT GGGCTCTCT CCCGTGAGCA AAGGGGGCA	1400
Mouse Delta DNA	CCTGCCGGGA CAGGTGAAC GACTTCTCT GACCTGCCC CCTGGCTAC	1429
Human Delta	CCTGCCGGGA TGGGTGAAC GACTTCTCT GACCTGCCC CCTGGCTAC	1155
Consensus	CCTGCCGGGA TGGGTGAAC GACTTCTCT GACCTGCCC CCTGGCTAC	1450
Mouse Delta DNA	ACGGGCAGGA ACTGCAGTGC CCCGACAGC AGGTGGAGC AAGCACCCCTG	1479
Human Delta	ACGGGCAGGA ACTGCAGTGC CCCGACAGC AGGTGGAGC AAGCACCCCTG	1205
Consensus	ACGGGCAGGA ACTGCAGTGC CCCGACAGC AGGTGGAGC AAGCACCCCTG	1500
Mouse Delta DNA	CCAAATATGGG GCCACCTGCC ACTAGAGGGG CCAACGCTAC ATGTGTGAGT	1529
Human Delta	CCAAATATGGG GCCACCTGCC ACTAGAGGGG CCAACGCTAC ATGTGTGAGT	1255
Consensus	CCAAATATGGG GCCACCTGCC ACTAGAGGGG CCAACGCTAC ATGTGTGAGT	1550
Mouse Delta DNA	GGGCCGAGG CTATGGGGG CCCAACTGCC ATTCTGCT CCGTGATCC	1578
Human Delta	GAGCCGAGG CTATGGGGG CCCAACTGCC ATTCTGCT CCGTGATCC	1305
Consensus	GAGCCGAGG CTATGGGGG CCCAACTGCC ATTCTGCT CCGTGATCC	1600
Mouse Delta DNA	-ACCGCAGG GCCCATGGTG GTGGATCTC AGTGATAGC ATATGCAGA	1625
Human Delta	GCCCCCGGG GCCCATGGTG GTGGATCTC CCTATATTA ACCTAATAG	1355
Consensus	GACCGCAGG GCCCATGGTG GTGGATCTC ATATATATTA ACCTAATAG	1650
Mouse Delta DNA	GGCGGGGGG GCCCTTCCCC TTGCTGCGG TGTGAGCCGG GGTGCTCTT	1675
Human Delta	GGCGGGGGG GCCCTTCCCC TTGCTGCGG TGTGAGCCGG GGTGCTCTT	1405
Consensus	GGCGGGGGG GCCCTTCCCC TTGCTGCGG TGTGAGCCGG GGTGCTCTT	1700
Mouse Delta DNA	GTCTCTTGC TGTGCTGGG CTGTGCGT GTGTGGGTCT GCGTCCGGCT	1725
Human Delta	GTCTCTTGC TGTGCTGGG CTGTGCGT GTGTGGGTCT GCGTCCGGCT	1455
Consensus	GTCTCTTGC TGTGCTGGG CTGTGCGT GTGTGGGTCT GCGTCCGGCT	1750
Mouse Delta DNA	GAGGCTACAG AATCACCGC CTCCACTGA ACCCTGCGG GGGAGACAG	1775
Human Delta	GAGGCTACAG AATCACCGC CTCCACTGA ACCCTGCGG GGGAGACAG	1505
Consensus	GAGGCTACAG AATCACCGC CTCCACTGA ACCCTGCGG GGGAGACAG	1800
Mouse Delta DNA	AATACATGAA CAACCTGAC AATGCCAGC GAGAGAGGA CTATCTGTT	1825
Human Delta	AATACATGAA CAACCTGAC AATGCCAGC GAGAGAGGA CTATCTGTT	1555
Consensus	AATACATGAA CAACCTGAC AATGCCAGC GAGAGAGGA CTATCTGTT	1850
Mouse Delta DNA	AGCATCATG GGGTACCA GATCAAGAAC ACCAACAAGA AGGCGGACTT	1875
Human Delta	AGCATCATG GGGTACCA GATCAAGAAC ACCAACAAGA AGGCGGACTT	1605
Consensus	AGCATCATG GGGTACCA GATCAAGAAC ACCAACAAGA AGGCGGACTT	1900
Mouse Delta DNA	TACGCCGAC CAGGAGCCA AAGAGACAG CTTAAGGTC CGTACCCCA	1925
Human Delta	CCACCCGAC CAGGAGCCA AAGAGATCG CTTAAGGTC CGTACCCAG	1655
Consensus	TACGCCGAC CAGGAGCCA AAGAGACAG CTTAAGGTC CGTACCCMR	1950

FIG. 13 (cont'd)

## Mouse Delta vs Partial Human Delta

Mouse Delta DNA	CTGTGGACTA TAACCTCGT	CTAGACCTCA AGGGGAGGA AGCCGCGTC	1975
Human Delta	NGGTGGACTA TAACCTCGT	CAGGACCTCA AGGGGAGGA TCCCGCGTC	1705
Consensus	NHGTGGACTA TAACCTCGT	CRGACCTCA AGGGGAGGA TCCCGCGTC	2000
Mouse Delta DNA	AGGGATACAC ACAGCAACCG TGACACCAAG TGCCAGTCC ACAGGCTGAC		2025
Human Delta	AGGGACCCAC ACAGCAACCG TGACACCAAG TGCCAGTCC ACAGGCTGTC		1755
Consensus	AGGGATACAC ACAGCAACCG TGACACCAAG TGCCAGTCC ACAGGCTGAC		2050
Mouse Delta DNA	AGGAGAGGAG AA---GATCC CC---CCACA CTAA GGGGT GG---AGAT		2067
Human Delta	AGGAGAGGAG AAGGGGACCC CCGACCCACA CTAA GGGGT GGGGAGCA		1805
Consensus	AGGAGAGGAG AAGGGGACCC CCGACCCACA CTAA GGGGT GGGGAGCA		2100
Mouse Delta DNA	TCTTGAGAGA AAAAGGCCCG AAT---GTC TACTGAC---T TCAAAGGAC		2113
Human Delta	TCTTGAGAGA AAAAGGCCCG AATTCGGGT TGTTCACIT TCAAAGGAC		1855
Consensus	TCTTGAGAGA AAAAGGCCCG AATTCGGGT TGTTCACIT TCAAAGGAC		2150
Mouse Delta DNA	-AC---AGTAC GATCGGTGT ATGTCTCTC TGAGAA---A AGGATGATG		2160
Human Delta	ANCAAGTAC GATCGGTGT NGGTCTCTC CAGAGGAGGA AGGATGATG		1905
Consensus	ANCAAGTAC GATCGGTGT NGGTCTCTC CAGAGGAGGA AGGATGATG		2200
Mouse Delta DNA	TGTATA---C GACTGAGCT- GTAAAGATGA AGCGATTCG CAAATTTCC		2208
Human Delta	CGTATAAGCA ANTTGAGGTN GTAAANTGCA AG---T-TG---AATTT---		1945
Consensus	TGTATAAGCA RNTTGAGGTN GTAAANTGCA AGGATTCG CAAATTTCC		2250
Mouse Delta DNA	ATTCTCTCTA AATAAATTC CAGGATATA GCGCCGATGA ATGCTTCGA		2258
Human Delta	---GGA AAGNNN- TC CCGGAT---TCCGT---TTC---		1972
Consensus	ATTCTCTCTA AAKNNNATTC CAGGATATA GCGCCGATGA ATGCTTCGA		2300
Mouse Delta DNA	GAGACGAAGG GAGAGCAAC CCAUGGACTG CTCTGAGAA CCAGGTCAG		2308
Human Delta	---GAGAGGAAGG GAGAGCAAC CCAUGGACTG CTCTGAGAA CCAGGTCAG		1981
Consensus	GAGAGGAAGG GAGAGCAAC CCAUGGACTG CTCTGAGAA CCAGGTCAG		2350
Mouse Delta DNA	GCGAAGCTGG TTCTCTCAGA GTTAGCAGAG GCGCCGACA CTGCCAGCCT		2358
Human Delta	---GCGAAGCTGG TTCTCTCAGA GTTAGCAGAG GCGCCGACA CTGCCAGCCT		1981
Consensus	GCGAAGCTGG TTCTCTCAGA GTTAGCAGAG GCGCCGACA CTGCCAGCCT		2400
Mouse Delta DNA	AGGCTTTGGC TGCCGCTGGA CTGCTGCTG GTTGTTCCTA TTGCACTATG		2408
Human Delta	---AGGCTTTGGC TGCCGCTGGA CTGCTGCTG GTTGTTCCTA TTGCACTATG		1981
Consensus	AGGCTTTGGC TGCCGCTGGA CTGCTGCTG GTTGTTCCTA TTGCACTATG		2450
Mouse Delta DNA	GACAGTTGCT TTGAAGAGTA TATATTTAA TGGACGAGTG ACTTGATTCA		2458
Human Delta	---GACAGTTGCT TTGAAGAGTA TATATTTAA TGGACGAGTG ACTTGATTCA		1981
Consensus	GACAGTTGCT TTGAAGAGTA TATATTTAA TGGACGAGTG ACTTGATTCA		2500
Mouse Delta DNA	TATAGGAAGC ACGCACTGCC CACACGTCTA TCTTGATTA CTATGAGCCA		2508
Human Delta	---TATAGGAAGC ACGCACTGCC CACACGTCTA TCTTGATTA CTATGAGCCA		1981
Consensus	TATAGGAAGC ACGCACTGCC CACACGTCTA TCTTGATTA CTATGAGCCA		2550
Mouse Delta DNA	GTCCTTCCTT GAACTAGAAA CACAACCTGCC TTTATTGTCC TTTTGATAC		2558
Human Delta	---GTCCTTCCTT GAACTAGAAA CACAACCTGCC TTTATTGTCC TTTTGATAC		1981
Consensus	GTCCTTCCTT GAACTAGAAA CACAACCTGCC TTTATTGTCC TTTTGATAC		2600

FIG. 13 (cont'd)

## Mouse Delta vs Partial Human Delta

Mouse Delta DNA	TGAGATGTGT TTTTMTTTT CCTAGACGGG AAAAAGAAAA CGTGTGTTAT	2608
Human Delta	-----	1981
Consensus	TGAGATGTGT TTTTMTTTT CCTAGACGGG AAAAAGAAAA CGTGTGTTAT	2650
Mouse Delta DNA	TTTTTGGGA TTGTAAAAA TATTTTCAT GATATCTGTA AAGCTTGACT	2658
Human Delta	-----	1981
Consensus	TTTTTGGGA TTGTAAAAA TATTTTCAT GATATCTGTA AAGCTTGACT	2700
Mouse Delta DNA	ATTTGTGAC GTTCATTTT TTATAATTTA AATTTGGTA AATATGTACA	2708
Human Delta	-----	1981
Consensus	ATTTGTGAC GTTCATTTT TTATAATTTA AATTTGGTA AATATGTACA	2750
Mouse Delta DNA	AAGGCACTTC GGGTCTATGT GACTATATTT TTTGTATAT AAATGTATTT	2758
Human Delta	-----	1981
Consensus	AAGGCACTTC GGGTCTATGT GACTATATTT TTTGTATAT AAATGTATTT	2800
Mouse Delta DNA	ATGCAATATT GTGCAATGT TATTTGAGTT TTTACTGTT TTGTTAATGA	2808
Human Delta	-----	1981
Consensus	ATGCAATATT GTGCAATGT TATTTGAGTT TTTACTGTT TTGTTAATGA	2850
Mouse Delta DNA	AGAAATTCAT TTTAAAAATA TTTTCCAAA ATAAATATAA TGAAC TACA	2857
Human Delta	-----	1981
Consensus	AGAAATTCAT TTTAAAAATA TTTTCCAAA ATAAATATAA TGAAC TACA	2899

FIG. 13 (cont'd)

G F T W P G T F S L I I E A L H T D S P D S 21  
 D L A T E N P E R L I S R L A T Q R H L > 41  
 T V G E E W S Q D L H S S G R T D L K Y > 61  
 S Y R F V C D E H Y Y G E G C S V F C R > 81  
 P R D D A F G H F T C G E R G E K V C N > 101  
 P G W K G P Y C T E P T C L P G C D E Q > 121  
 H G F C D K P G E C K C R V G W O G R Y > 141  
 C D E C I R Y P G C L H G T C Q Q P W O > 161  
 C N C Q E G W G G L F C N Q D L N Y C T > 181  
 H H K P C K N G A T C \* T N T G Q G \* 198  
 S Y T \* P S R \* K N G G S L T D L \* 213  
 E N S Y S C T C P P G F Y G K I C E L S A M > 235  
 T C A D G P C F N G G R C S D S P D G G > 255  
 Y S C R C P V G Y S G F N C E K K I D Y > 275  
 C S S S P C S N G A K C V D L G D A Y L > 295  
 C R C Q A G F S G R H C D D N V D D C A > 315  
 S S P C A N G G T C R D G V N D E S C T > 335  
 C P P G Y T G R N C S A P A S R C E H A > 355  
 P C H N G A T C H E R G H R Y \* C E C A > 374  
 R S Y G G P N C \* F L L P E \* P P G P \* 391  
 V V \* L L L G C A A V V V C V R L R L Q K H > 412  
 R P P A D P \* R G E T E T M N N L \* 428  
 N C Q R E K D I S V S I I G \* T O I K N T N > 449  
 K K A D F H G D H \* A D K N G F K A R Y P \* 469  
 V D Y N L V O D L K G D D T A V R D A H S K R D T K \* 495  
 Q P O G S S G E E K G T P \* P T L R \* G G \* 514  
 T \* R K R P \* S \* S T \* S K D \* T \* 526  
 C V I \* E V \* 531

FIG. 14